

PAVLOV, P.I.

Some results of fishery research in the Eastern Sivash and  
Molochnyy Liman. Vop. ikht. 1 no.3:422-434 '61. (MIRA 14:11)

1. Institut gidrobiologii AN USSR.  
(Sivash--Fisheries)  
(Molochnoye, Lake--Fisheries)

PAVLOV, P.I.

Morephometric characteristics of the Dnieper roach and its  
economic importance. Zool. zhur. 40 no. 2:244-250 F '61.  
(MIRA 14:2)

1. Institute of Hydrobiology, Academy of Sciences of the  
Ukrainian S.S.R. (Kiev).

(Dnieper River—Roach (Fish))

PAVLOV, P.I.; SMIRNOV, A.I.

*Leucaepius delineatus* (Heckel) in the basin of the middle  
Dnieper River. Zool.zhur. 44 no.10:1574-1577 '65. (MIRA 18:11)  
1. Institut gidrobiologii AN Ukr-SSR, Kiyev.

Резюме, с. 2.

Hybrid *Scaphinotus erythrocephalus* (L.) x *S. caudatus* (L.)  
*schistocervi* Brensky. Zool. Zhurn. 40, 6, 1995, 39-44.

1. Institut gidrobiologii AN UkrSSR, Kyiv.

ZVAZIKOV, B.Kh., mayor zapasa; GRINCHENKO, V.Ye., polkovnik, red.;  
BELYAYEV, M.K., podpolkovnik, red.; SUKHOMLINOV, F.M.,  
mayor, red.; GOLUBEV, G.G., polkovnik zapasa, red.; PAVLOV,  
P.I., polkovnik v otstavke, red.; YABLOKOVA, G.I., red.

[Gold Stars of the Chechen-Ingush A.S.S.R.; sketches on  
Heroes of the Soviet Union] Zolotye zvezdy Checheno-  
Ingushetii; ocherki o Geroiakh Sovetskogo Soiuza. Groznyi,  
Checheno-Ingushskoe knizhnoe izd-vo, 1964. 310 p.  
(MIRA 18:4)

LAZAREV, P.S., FEDOROV, A.I., prof.; BUKHTILOV, F.N., dotsent; PAVLOV, P.I., dotsent; ZASLONOV, M.S.; PLEKHANOV, B.P.; Prinimali uchastiye: GRIBOVSKIY, G.P., veterinarnyy vrach; RYBAKOVA, A.V., veterinarnyy vrach

Some characteristics of the course of rabies in cattle. Veterinariia  
39 no.9:20-22 S '62. (MIRA 16:10)

1. Troitskiy veterinarnyy institut (for Lazarev, Fedorov, Bukhtilov, Pavlov). 2. Direktor Troitskoy mezhsovkhoznoy veterinarno-bakteriologicheskoy laboratorii (for ZaslonoV). 3. Glavnyy veterinarnyy vrach Bredinskogo rayona, Chelyabinskoy oblasti (for Plekhanov).

PAVLOV, P.I.

Adaptive variability of wild carp. Vop. skol. 5:154-155 '62.  
(MIRA 16:6)

1. Institut gidrobiologii AN UkrSSR, Kiyev.  
(Carp) (Adaptation (Biology))

KOMAROVSKIY, A.N.; KURYSHEV, V.S.; LAVROV, A.V.; PAVLOV, P.I.;  
SHIRYAYEV, P.Z.

The buildings, foundations and protective installations  
of an accelerator with rigid focusing for an energy of  
7.0 Gey. Prom. stroi. 41 no.2:31-34 F '63. (MIRA 16:3)  
(Particle accelerators—Design and construction)



KALDERON, Dimitritsa; KOSHARSKA, Tinka; DRUMEV, Bozhidar, inzh.; BOZHINOV, Sava Filipov; KHRISTOV, Ivan Filipov, uchenik; OVANOVA, Mela, prepodavatelka; MILKOV, Vuliu; NIKOLOV, Iordan Georgiev; SHALAVEROV, Zlati Dimitrov; PASKOVA, Stoika Ivanova; PAVLOV, Pavel Iordanov

During the new school year better achievements. Nauka i tekhn z mladezh no.10:3-4,16 '61.

1. Zav. otdel "Srednoshkolska mladezh" v TSK na DKMS(for Kalderon)
2. Sekretar na zavodskia komitet na DKMS v zavod "Stalin", Dimitrovo (for Kosharska)
3. Predsedatel na nauchno-tekhnikeskoto d-vo i nachalnik biuro "Tekhnicheski progress" v zh. p. zavod "G. Dimitrov" Sofiya. (for Drumev)
4. Sekretar na Okruzhniia komitet na DKSM, Plovdiv(for Bozhinov)
5. Selskostopanski tekhnikum v x. Sadovo, Plovdivski okrug (for Khristov, Ivanova)
6. Direktor na MTS s. "Ekzarkh Antimovo" Gurgaski okrug (for Milkov)
7. MTS, Gorna Oryakhovitsa (for Nikolov)
8. Sekretar na Okruzhniia komitet na DKMS, Turnovo(for Shalaverov)
9. Bibliotekarka v s. Rudnik, Varnenski okrug (for Paskova)
10. Sekretar na Okruzhniia komitet na DKMS, Varna (for Pavlov)

(Education)

LAZAREV, P. S., FEDOROV, A. I. (Professors), BUKHTILOV, F. N., PAVLOV, P. I. (Docents, Troitsk Veterinary Institute), Zaslouov, M. S. (Director of the Troitsk Intersovkhoz Veterinary Bacteriological Laboratory) and PLEKHANOV, B. P. (Head Veterinary Doctor of the Bredinsk District, Chelyabinsk Oblast')

"Certain characteristics of the course taken by rabies in cattle"

Veterinariya, vol. 39, no. 9, September 62, p. 20

PAVLOV, P. I.

PAVLOV, P. I.: "The pathomorphology and certain problems of the pathogenesis of drepanidontiasis of geese". Voronezh, 1955. Min Agriculture USSR. All-Union Inst of Helminthology imeni Academician K. I. Skryabin. (Dissertations for the Degree of Candidate of Veterinary Sciences)

SO: Knizhnaya letopis', No. 52, 24 December, 1955. Moscow.

USSR/Farm Animals. Domestic Birds

2-5

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 50110

Author : Pavlov P.I.

Inst : Voronezh Institute of Zoological and Veterinary Sciences

Title : On the Problem of a Sharp Distension of Stomach and Esophagus  
in Geese (From a Dissector's Experience).

Orig Pub : Tr. Voronezhsk. zoovet. in-ta, 1956, 13, 133-135

Abstract : A case of mass epizooty of geese due to grain overfeeding (168 gr of wheat grain for a single feeding) is described, which occurred after a period of underfeeding (40-50 gr of millet twice daily for 5 days). The swelling of the grain fodder produced a sharp distension of the stomach and of the esophagus, which acquired a spindle-like form up to 6 cm in diameter. This fact caused a compression of the heart and of the lungs. Death occurred as a result of asphyxia which was accompanied by symptoms of a gradually weakening heart activity. --I.L. Pozdnyunin

Card : 1/1

PAVLOV, Petr Ivanovich; PCHELINTSEVA, G.M., red.; KORSHUNOVA, N.I.,  
tekh. red.

[Radiography--Safety regulations] Pamiatka po tekhnike bezopas-  
nosti dlia radiografa. Moskva, Gosatomizdat, 1962. 27 p.  
(MIRA 16:1)

(Radiography--Safety regulations)

MITHUNA, Neel: PAV IV, 1964.

Interaction of ...  
See also ...

PAVLOV, P. M.

20754. Pavlov, P. M. Protivopozitsiye bol'shikh otverstiy. Stenki i instrumenty, 1963, No. 6, s. 14-16.

SO: LITOPIS JURNAL STATY - Vol. 25, Moskva, 1963.

F BAKHILZE, V.N.; PAVLOV, P.M.

Mining Engineering

Application of the analytical method in mining (continuation), Gor.zhur, no. 7, 1952

9. Monthly List of Russian Accessions, Library of Congress, October <sup>1952</sup> ~~1953~~ Uncl.



PAVLOV, Petr Mikhaylovich, prof.; KAGANOV, Yefim Davydovich, dots.;  
ZALKIND, A.I., red.; BAZLOVA, Ye.M., mlad. red.;  
GERASIMOVA, Ye.S., tekhn. red.

[Socialist production of the means of production at the  
present stage] Sotsialisticheskoe vosproizvodstvo na sov-  
remennom etape. Moskva, Ekonomizdat, 1963. 343 p.  
(MIRA 17:1)

(Economics)

CHUKHNO, A.A.; KOZLOV, G.A.; KASHCHENKO, A.I.; AGANBEGYAN, A.G.; VOLKOV, M.I.; ZHUKOVSKIY, Ya.M.; NAGORNIY, A.F.; TSAGOLOV, N.A.; KOVALEVA, M.F.; PAVLOV, P.M.; ATLAS, M.S.; KATS, A.I.; NAROVLYANSKIY, N.G.; ANCHISHKIN, I.A.; SPIRIDONOVA, N.S.; KRONROD, Ya.A.; SULIMOV, I.A.; BREGEL', E.Ya.; ROZENMAN, Ye.S.; VARTANYAN, K.A.; NOVIKOV, V.A.; GATOVSKIY, L.M.

Structure and content of the course on the economics of socialism.  
Vop. ekon. no.6:57-143 Je '62. (MIRA 15:6)

1. Kiyevskiy gosudarstvennyy universitet (for Chukhno).
2. Vysshaya partiynaya shkola pri Tsentral'nom komitete Kommunisticheskoy partii Sovetskogo Soyuza (for Kozlov, Volkov, Zhukovskiy).
3. Yaroslavskiy gosudarstvennyy pedagogicheskiy institut (for Kashchenko, Narovlyanskiy, Sulimov).
4. Institut ekonomiki i organizatsii promyshlennogo proizvodstva Sibirskogo otdeleniya AN SSSR (for Aganbegyan).
5. Institut povysheniya kvalifikatsii prepodavateley obshchestvennykh nauk pri Kiyevskom gosudarstvennom universitete (for Nagornyy).
6. Moskovskiy gosudarstvennyy universitet (for TSagolov, Spiridonova).
7. Akademiya obshchestvennykh nauk pri Tsentral'nom komitete Kommunisticheskoy partii Sovetskogo Soyuza (for Kovaleva).
8. Leningradskiy finansovo-ekonomicheskiy institut (for Pavlov).
9. Moskovskiy finansovyy institut (for Atlas).
10. Nauchno-issledovatel'skiy institut truda (for Kats).
11. Institut ekonomiki AN SSSR (for Anchishkin, Kronrod).
12. Moskovskiy ekonomiko-statisticheskii institut (for Bregel').
13. Moskovskiy energeticheskii institut

(Continued on next card)

CHUKHNO,---(Continued) Card 2.

(for Rozenman). 14. Armyanskiy sel'skokhozyaystvennyy, institut  
(for Vartanyan). 15. Permskiy politekhnicheskiy institut (for  
Novikov). 16. Chlen-korrespondent Akademii nauk SSSR, glavnyy  
redaktor zhurnala "Voprosy ekonomiki" (for Gatovskiy).  
(Economics--Study and teaching)

PAVLOV, Petr Mikhaylovich; AZAROV, E.K., red.; SHERMUSHENKO, T.N.,  
tekhn.red.

[Technological progress and the renovation of fixed assets]  
Tekhnicheskii progress i obnovenie osnovnykh fondov. Lenin-  
grad, Lenizdat, 1960. 53 p. (MIRA 13:7)  
(Industrial equipment)

PAVLOV, Petr Mikhaylovich, doktor ekon.nauk; KONDRASHEV, D., otv. red.;  
~~LOGOVINSKAYA, R., red. isd-va;~~ LEBEDEV, A., tekhn.red.

[Ways for decreasing construction costs] Rezervy snizheniya  
stoimosti stroitel'stva. Moskva, Gosfinizdat, 1958. 87 p.  
(Construction industry--Costs) (MIRA 11:12)

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Pavlov, Petr Mikhaylovich

Rezervy Snizheniya Stoimosti Stroitel'stva

Reserves Reducing the Cost of Construction

Moskva, Gosfinizdat, 1958

87 p. tables

Bibliographical Footnotes

*ca*

Molar volumes in condensed systems. P. N. PAVLOV. J Phys. Chem (U.S.S.R.)  
3, 448-50(1972) - Van der Waals' equation is applied to mixts of liquids with the same  
b's. The expression  $(b - b_1)/(ab - a_1b)$  is used at 19 F H Rabinovich

ASD SLA METALLURGICAL LITERATURE CLASSIFICATION

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Equation of state for condensed systems. P. N. D'AVANZO, *J. Phys. Chem.*  
(U S A R ) 3, 455-76(1932) — A system of three equations is derived: (1)  $v/v_0 = v_1/v_0$ ,  
(2)  $[p + (3/2) \omega a b_0^2 \omega_0^2 \omega_1^2 \omega_2^2] / (v - b) = RT$ , and (3)  $b_0 = b_0(T/T_0)^{1/2}$ , where  $b_0 = 0.69 \times 10^{-2}$ ,  $a$  and  $b$  have van der Waals  
signification and  $v/v_0$  is the real molar vol., to describe the behavior of liquids. The  
system is applied to  $\text{Et}_2\text{O}$ ,  $\text{MeOH}$ ,  $\text{EtOH}$  and  $\text{PrOH}$ , and to water. For the equil.  
 $nA \rightleftharpoons A$ , the const. is  $k = (x_{A0}/x_A)^n = (1 - \omega)(\omega - 1)^{n-1} / (\omega_0 - 1)^n$ .  
The values of  $k$  are detd. for the equil.  $4\text{C}_2\text{H}_5\text{O} \rightleftharpoons (\text{C}_4\text{H}_{10}\text{O})_2$  and for  $2(\text{H}_2\text{O})_n \rightleftharpoons$   
 $(\text{H}_2\text{O})_{2n}$ .  
P. H. RATHMANN







*CP*

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Specific volume and density of solutions. P. N. Pavlov.  
*Acta Physicochim.* U. R. S. S. 8, 756-68(1935)(in Ger-  
man); C. C. A. 37, 3076-8; 29, 2043.—The equations  
previously derived are applied to formulas relating mol.  
wt., d. and the degree of sol. assocn. in the condensed  
state, to a law of partial ds., to a law of sp. vol., to  
contraction and expansion in the formation of sols. and to  
a law of ds.  
H. R. Rushton

A.S.M.-S.E.A. METALLURGICAL LITERATURE CLASSIFICATION

B.D.O.N. DOWLING

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Absolute zero, and the sub-zero region of temperatures and reactions. P. N. EAYLOY (Ukrain. Chem. J., 1935, 10, 285-294).—Theoretical. The possibility of temp.  $< 0^\circ$  abs. is envisaged, and the properties of matter in this region are discussed. R. T.

ADD-31A METALLURGICAL LITERATURE CLASSIFICATION

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| (1) APP. 100 (2) 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |  |  |  |  |  |  | (3) APP. 100 (2) 100                                                                                                                                   |  |  |  |  |  |  |  |  |  |
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| PROCESSING AND PREPARATION DATA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |  |  |  |  |  |  | APP. 100 (2) 100                                                                                                                                       |  |  |  |  |  |  |  |  |  |
| <div style="position: absolute; top: 10px; left: 10px; font-size: 2em;">BC</div> <div style="position: absolute; top: 10px; right: 10px; font-size: 1.5em;">B-II-2</div> <div style="position: absolute; top: 50px; left: 50px; border: 1px solid black; padding: 5px;"> <p>Relative strength of agar-agar gels, in relation to the conditions of extraction. P. N. FANLOP, H. A. KOSKOVICH, and R. VOLK (U.S. Chem. J. 1955, 28, 377-384). The relative strength of the gels is at a max. when the washed phytoplasm are extracted for 6 hr. with boiling H<sub>2</sub>O containing 5 mg. of CaO per 100 g. of phytoplasm. R. T.</p> </div> |  |  |  |  |  |  |  |  |  | <div style="position: absolute; top: 50px; left: 50px; border: 1px solid black; padding: 5px;"> <p>ASD-52A OTTAWA LITERATURE CLASSIFICATION</p> </div> |  |  |  |  |  |  |  |  |  |
| FROM DIVISION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |  |  |  |  |  |  | FROM DIVISION                                                                                                                                          |  |  |  |  |  |  |  |  |  |
| SUBJECT MAT. ONLY ONE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  | SUBJECT MAT. ONLY ONE                                                                                                                                  |  |  |  |  |  |  |  |  |  |
| MILESTONE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  | MILESTONE                                                                                                                                              |  |  |  |  |  |  |  |  |  |
| FROM DIVISION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |  |  |  |  |  |  | FROM DIVISION                                                                                                                                          |  |  |  |  |  |  |  |  |  |

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| 117 AND 118 CODES                                                                                                                                                                                                                                                                                                                                                                                                       |  |  |  |  |  |  |  |  |  | 119 AND 120 CODES |  |  |  |  |  |  |  |  |  |
| PROCESS AND PROPERTIES INDEX                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |
| BC                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |  |  |  |  |  |  | B D-2             |  |  |  |  |  |  |  |  |  |
| <p>Change in properties of agar-agar under the influence of freezing. P. N. FAYLEY and R. VOLINA (Ukrain. Chem. J., 1968, 10, 486-488).—Part of the <math>H_2O</math> is evaporated from the gels during thawing after freezing at <math>-20^\circ</math>; the mineral and N contents of the residual gels are <math>&lt;</math>, and their tensile strength is <math>&gt;</math>, than of the original gels. R. T.</p> |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |
| ADD. 55A METALLURGICAL LITERATURE CLASSIFICATION                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  |                   |  |  |  |  |  |  |  |  |  |
| 117 AND 118 CODES                                                                                                                                                                                                                                                                                                                                                                                                       |  |  |  |  |  |  |  |  |  | 119 AND 120 CODES |  |  |  |  |  |  |  |  |  |
| 117 AND 118 CODES                                                                                                                                                                                                                                                                                                                                                                                                       |  |  |  |  |  |  |  |  |  | 119 AND 120 CODES |  |  |  |  |  |  |  |  |  |



| 1ST AND 2ND ORDERS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |            |         |            |         |            |         |            |         |            | 3RD AND 4TH ORDERS |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
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| PROCESSES AND PROPERTIES INDEX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |            |         |            |         |            |         |            |         |            |                    |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
| <p>Effect of cations and anions on the tensile strength of agar and gelatin. P. N. Pavlov and M. M. Engel'shtein (Kolloid J. (U. S. S. R.) 2, 821-9 (1936).—The effect of cations on the strength of agar gels decreases in the order</p> <p>Cs, Rb, NH<sub>4</sub>, K, Na, Li and by Ca, Ba, Sr in neutral, acid and alk. solns. For anions the decreasing series nitrate, bromide, sulfate, chloride, iodide and acetate holds. The strength is higher in alk. than in acid solns. Gelatin gives the decreasing series, Ca, Rb, K, Li, Na at <math>pH</math> more than 4.4 and Li, Na, K, Rb, Cs at <math>pH</math> less than 4.0</p> <p>B. C. A.</p> |            |         |            |         |            |         |            |         |            |                    |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
| ADD-11-A METALLURGICAL LITERATURE CLASSIFICATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |         |            |         |            |         |            |         |            |                    |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |         |            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |    |    |
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1ST AND 2ND CODES

PROCESSES AND PROPERTIES INDEX

2

*Specific heat of complex compounds and their molecular structure.* P. N. Pavlov. *J. Gen. Chem.* (U. S. S. R.) 7, 3442-7 (1937).—A new method is developed for the study of the nature of at. forces and the no. of atoms in complex mols. of cryst. org. and inorg. compds. This method is based on the equation  $(Mq)(1/\omega)/(1 + a(\omega)) = 3.6$  where  $M$  is mol. wt. and  $q$  is sp. heat of the compd.,  $a$  is no. of internal kinetic units of the mol. and  $\omega$  is a coeff. characteristic of the mol. It is assumed that  $A$  for a given atom is 1 when an atom has 3 degrees of vibrational freedom and  $1/2$  and  $1/3$  when the number of degrees of vibrational freedom is 2 and 1, resp. Thus, in the case of elements  $a = 1$ ; for binary compds. like KCl,  $a = 2$ ; for ternary compds. like  $\text{BaCl}_2$ ,  $a = 3$ ; for quaternary compds. like  $\text{AlCl}_3$ ,  $a = 4$ ; in general, the total no. of internal kinetic units of a mol. is equal to the no. of atoms in the mol. In org. mols., in groups  $\text{CH}_3$  and  $\text{CH}_2$ , C and H are held together by covalent bonds and for these groups  $a$  is 4 or 3, resp. The value  $1/\omega$  is calcd. from equation  $M d \omega = (M d)_{\text{Au}} \times (1.14)$  where  $M$  is mol. wt. and  $d$  is density, and since for Au  $M d = 197.2/19.258$ ,  $M d \omega = 197.2/19.258 \times (1.14)$ . Thus it is possible to det. by this method the no. of atoms in a given compd. or, when  $a$  is known, to det. the nature of the bonds between atoms, i. e. whether the bonds are electrovalent or covalent. S. L. Madorsky

ASB 55.6 METALLURGICAL LITERATURE CLASSIFICATION

1937-1941

1942-1946

1947-1951

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1957-1961

1962-1966

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Dependence of the height of the polarographic wave on the concentration of the ion being deposited and of accompanying ions. P. N. Pavlov (J. Gen. Chem. Russ., 1937, 7, 2246-2258).—The height of the polarographic wave obtained with  $\text{FeSO}_4$  and  $\text{Al}(\text{OAc})_3$ , but not with  $\text{ZnCl}_2$ ,  $\text{SnCl}_2$ , or  $\text{NiCl}_2$  solutions, or the respective concns. The height of the wave falls to a min. and then rises as the concn. of accompanying electrolytes is raised. The max. depressing effect for different ions is given by the series  $\text{Al} > \text{Ca} > \text{Na}$ , and  $\text{SO}_4 > \text{OAc} > \text{Cl} > \text{NO}_3$ . R. T.

A-1

**Polarographic detection of zinc and nickel present together.** P. N. PAVLOV and G. S. PAVLENKO (J. Gen. Chem. Russ., 1937, 7, 2260-2263). The deposition potentials of Zn and Ni from solutions of their simple salts are so close to each other (1.06 and 1.002 v., respectively) as to render the polarographic detection of one in presence of the other impossible. In presence of aq.  $\text{NH}_3$  and gelatin the potentials become 0.96 v. for Ni and 1.36 v. for Zn, and the metals can then be distinguished. R. T.

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*Planting*

2131. After effect of low temperatures on the growth of mayale plants cultivated under conditions of varying moisture content of the soil.

S. S. R. 1951, 76, 597, 600, *Bot.* 1952, 22, 90. A high percentage of badly damaged and dead plants occurred, after freezing, in mayale grown in soil with 50% and particularly with 30% soil moisture. Plants grown at 50% moisture showed greater resistance to low temperatures. 122132

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Repair of a butterfly angle valve; Rab. energ. 2 no. 1, 1952.

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USSR/Mathematics - Modern Algebra

Sep/Oct 52

"Slov p-Subgroups of a Complete Linear Group Over a Simple Field of Characteristic p," P. P. Pavlov

"Iz Ak Nauk SSSR, Ser Matemat" Vol 16, No 5, pp 437-458

Investigates the Slov p-subgroup of a linear group over a field of p elements. Finds the generators of this group and the relations among them which define the group. Also finds the group of all

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automorphisms of the studied group. Cites Dubisch and Perlis, "On Total Nilpotent Algebras," Amer Jour of Math. 73, 1951, pp 439-452. Submitted by Acad I. M. Vinogradov 16 Jan 52.

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PAVLOV, P.P.

"Motion of Emulsified Oils for Small Values of the Reynolds Parameter" Dokl. AN Az SSR, Vol 10, No 7, 1954, 467-471 (Azerbaydzhani resume)

The author describes and gives results of experiments in determining pressure loss during the pumping of emulsified oils for small values of  $R$ , the Reynolds number. He shows that for  $R$  between 20 and 35 the Coefficient of hydraulic resistance is in agreement with the formula  $64$  divided by  $R$ . He shows that for smaller values of  $R$  the correct formula is  $64(1+F)/R$ , where  $F$  is a function of the Reynolds number depending on viscosity. (RZhMekh, No 9, 1955)

*Energetics Inst., AS Azerbaydzhan SSR.*

PAVLOV, Petr Petrovich; SHIBAYEV, G.I., redaktor; RZAYEV, I.M., tekhnicheskiy redaktor.

[Fire prevention in the petroleum industry] *Protivopozharnye merepriiatiia v neftepromyslovom dele. Baku, Azerbaidzhanskoe gos. izd-vo neftianei i nauchno-tekhn. lit-ry, 1955. 127 p.*  
(MIRA 9:4)  
(Petroleum industry--Fires and fire prevention)

PAVLOV, P.P.: KHOVANOVA, A.M.

Variation in the fractional composition of petroleum and petroleum  
products during free-surface combustion. Uch.zap.agu no.6:21-27  
'55. (MLBA 9:11)

(Petroleum) (Combustion)

PAVLOV, P.P., kandidat tekhnicheskikh nauk.

Viscosity of petroleum oil emulsions. Trudy Azerb.ind.inst. no.9:76-81  
'55. (Viscosity) (Petroleum) (MLRA 9:10)

PAVLOV, P.P.

✓ Changes in the fractional composition of petroleum and petroleum products during combustion on a free surface. P. P. Pavlov and A. M. Khovanova. *Trudy Azerbaidzhan. Ind. Inst. im. M. Azizbekova* 1955, No. 11, 76-83 (in Russian); cf. preceding abstr.—Combustion of petroleum and petroleum products was studied in open vessels 0.42-3.64 m. in diam. by the detn. of the gravity, and the kinematic viscosity of the material before and after 30-150 min. combustion. The sp. gr. increased in the surface layer of the material and throughout the whole heated zone, and the rise in sp. gr. was lower in larger vessels. The gum content, viscosity, sp. gr., and the flash point are raised, indicating a progressive loss of volatile products. The sp. gr. does not increase sufficiently in the surface layer to cause any appreciable migration of the heavier products into the underlying layers.

W. M. Stammers

gmb  
mt



~~PAVLOV, P. P.~~ PAVLOV, P. P.

✓ Combustion of petroleum and petroleum oils in open containers. P. P. Pavlov and A. M. Khoranova. *Trudy Azerbaidzhan. Inst. Khim. M. Azerbaidzhan* 1955, No. 31, 85-90 (in Russian); cf. *C.A.* 50, 7438b. The rate of combustion of crude oils, gasoline, kerosene, and residuum in burning storage tanks was studied by using an open vessel 0.8 m. in diameter, 0.16 m. high, 2.5 mm. wall thickness, and equipped with 20 thermocouples for measuring the temp. of the products, of the walls, and of the flame. The burning rate depends on the time of burning, the sp. gr. of the material, and its heating value. The results are presented graphically.

W. M. Sternberg

gmb  
mt

PAVLOV, P.P.; KHOVANOVA, A.M.

Snuffing out fires of oil and petroleum products on free surfaces in tanks. Dokl. AN Azerb.SSR 12 no.7:453-457 '56. (MLRA 9:10)

1. Predstavleno akademikom Akademii nauk Azerbaydzhanskoy SSR Kh.I. Amirkhanovym.

(Petroleum--Storage) (Petroleum industry--Fires and fire prevention)

PAVLOV, Petr Petrovich; KOCHARYANTS, Sh.M., redaktor; AL'TMAN, T.B.,  
redaktor izdatel'stva

[Using surface-active agents in oil extraction] Primenenie poverkhno-  
stno-aktivnykh veshchestv pri dobyche nefi. Baku, Azerbaidzhanskoe  
gos.izd-vo nefi. i nauchno-tekhn.lit-ry. 1957. 40 p. (MLRA 10:9)  
(Petroleum industry) (Surface-active agents)

*Pavlov, P. P.*

112-6-11903

Translation from: Referativnyy zhurnal, Elektrotehnika, 1957, Nr6, p. 20 (USSR)

AUTHOR: Kashin, Yu. V. and Pavlov, P.P.

TITLE: An Outfit for Testing of Electrical Flexible Cords for Bending  
(Ustanovka dlya ispytaniya elektricheskikh shnurov na soprotivleniye  
k izgibam)

PERIODICAL: Sbornik rats. predlozheniy, M-vo elektrotekhn. prom-sti SSSR, 1955, Nr 7-9.

ABSTRACT: The outfit imitates alternating  $\pm 90^\circ$  bends to which the cord is subjected at the point of its attachment to the household electrical devices. A device (for example, a soldering iron) with its cord is fastened to a rocking lever; the cord is stretched vertically by a weight. As the lever swings once a minute the cord is bent at the point of attachment to the device; after a while, one of the wires breaks. Here the motor is automatically stopped and a red signal lighted. The number of double bends registered by a meter serves as a characteristic of bending resistance of the cord.

R. M. L.

ASSOCIATION: Sevkabel' plant, Leningrad

Card 1/1

SCV-9C-58-10-1/9

AUTHORS: Pavlov, P.P., Kulikov, B.A., Ruvimskiy, V.A., Vol'pe, E.M.

TITLE: The Determination of the Permissible Current Load of a Single Strand of KTO-4 Logging Cable (Opredeleniye dopustimoy tokovoy nagruzki odinarnoy zhily karotazhnogo kabelya KTO-4)

PERIODICAL: Energeticheskiy byulleten', 1958, Nr 10, pp 1 - 3 (USSR)

ABSTRACT: The authors state that at the present time, old KTO-4 cable, unsuitable for logging, is being used in the oil industry for the illumination of borings. The Baku laboratory of TsNIIPC and the All-Union Scientific Research Institute for Safety Measures in the Oil Industry (VNIITB) have carried out an experiment to find the permissible current load of a single strand of KTO-4 logging cable, under a surrounding temperature of 35° C, and the maximum permissible temperature for the heat-resistant rubber insulation of the strand, according to the catalogue 65° C. The experiment was carried out on a section of an insulated strand 1.5 meters long, placed in a thermostat where the temperature was 35°. The current was fed to the strand from the lower side of a 220/12 volt transformer with a capacity of 300 watts, which was supplied from a 220 volt network. With the temperature

Card 1/2

The Determination of the Permissible Current Load of a Single Strand of  
KTO-4 Logging Cable

SOV-90-58-10-1/9

in the thermostat at 35°, the current flowing through the cable was found to be 25.5 amps when the temperature in the steel strand of the cable was 65°. Separate insulated strands of KTO-4 logging cable can therefore be used for lighting purposes providing the current load does not exceed 25 amps and the voltage is not over 220 v. The authors then give a formula for calculating the maximum length of strand which can be used. Besides the conclusions given above, the authors finally give the following: 1) the safety devices on the line should not be set higher than 25 amps; 2) KTO-4 cable cannot be used for feeding lighting or power loads either as a complete cable or in separate strands; 3) when the strands are used in external wiring they should be fastened to porcelain insulators; 4) the strands can only be used in lighting systems if the colored layer of rubberized linen is left on the rubber insulation. There is one diagram.

1. Electric cables--Electrical properties
2. Electric cables  
--Insulation

Card 2/2

24885

S/109/61/006/008/005/018  
D207/D304

6.7100

AUTHOR: Pavlov, P.P.

TITLE: Electromagnetic field and current distribution along  
an infinite isolated conductor in a conducting medium

PERIODICAL: Radiotekhnika i elektronika, v. 6, no. 8, 1961,  
1293 - 1307

TEXT: The purpose of this paper is to derive expressions for the field and current distribution, and to give a more rigorous basis for the customary use of telegraph equations in treating the finite isolated-conductor antenna as a transmission-line section with losses. Three media are considered in determining the electromagnetic field: 1) The conductor, characterized by  $\epsilon_1$ ,  $\mu_1$  and  $\sigma_1$ ; 2) A cylindrical cavity filled by an insulating material having the parameters  $\epsilon_2$ ,  $\mu_2$  and  $\sigma_2$ ; 3) A conducting medium,  $\epsilon_3$ ,  $\mu_3$ ,  $\sigma_3$ . The solution of the wave equation is discussed for the cylindrical

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Electromagnetic field and ...

24885

S/109/61/006/008/005/018  
D207/D304

cavity and for the absorbing medium. The current in the conductor  $I_z$  is related to the  $H_{\varphi 2}$  field component in the cylindrical cavity,  $I_z = 2\pi r H_{\varphi 2}$ . The expression for the current is

$$I_z = -i \frac{2\omega \epsilon_{k2} \delta}{\pi} \int_{-\infty}^{+\infty} \frac{r_2}{r_1^2 D} H_1^{(1)}(v_2 R_0) e^{i v_2 z} d\gamma. \quad (28)$$

where the functions  $v_2 = \sqrt{k_2^2 - \gamma^2}$  and  $v_3 = \sqrt{k_3^2 - \gamma^2}$  are two-valued functions on the plane of the complex variable  $\gamma$ . The branch points are  $\gamma = \pm k_2$ ;  $\gamma = \pm k_3$ . In addition to these singular points the integral has a pole when  $D = 0$ ,  $\gamma = \gamma_{p1}$ .  $D$  is the determinant of a system of equations obtained in solving the field distribution. The equation expressing the  $D = 0$  condition is very complicated in its original form, therefore, the cylindrical functions are replaced by their series approximations. The values of the singular

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S/109/61/006/008/005/018  
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Electromagnetic field and ...

integration contour represents a wave with an exponentially decreasing amplitude. This is the so-called cable wave. It satisfies the telegraph equation. The other part of the solution,  $J_{L_R}$ , corresponds

ing to the singularities  $\gamma = \pm k_3$  within the contour, represents a space wave. The amplitude of this wave decreases according to a very complicated law. To determine the dominant wave type, the author investigated the modulus  $|J_{L_R}/J_P|$  in the short, medium and

long wave-bands. The results are given in Fig. 4, (continuous line - sea water; dashed line - wet soil; dash-dot line - dry soil). The abscissa axis shows the distance from the point where the external emf is applied. The conclusion is drawn that apart from a small initial section the cable waves dominate over the space waves. This supports the applicability of the telegraph equation to the theory of an isolated conductor embedded in sea water or wet soil. In dry soil, at frequencies below  $3 \cdot 10^7$  cps the inequality

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Electromagnetic field and ... 24885

S/109/61/006/008/005/018  
D207/D304

$|J_L / J_R| > 1$  exists along a relatively long distance from the excitation point. The author thanks L.A. Vaynshteyn for his discussion of the problem. There are 7 figures, 2 tables and 3 Soviet-bloc references.

SUBMITTED: July 16, 1960

Card 5/6

21.869

S/109/61/006/007/009/020.  
D262/D306

9.1200

AUTHOR: Pavlov, P.P.

TITLE: The electromagnetic field and current distribution along  
an infinite non-insulated conductor inside a conducting  
medium

PERIODICAL: Radiotekhnika i elektronika, v. 6, no. 7, 1961,  
1106 - 1115

TEXT: In the present article the author analyzes the field of a non-  
insulated conductor of finite length for the frequency range 6 Kc/s  
to 30 Mc/s, assuming an ideally conducting infinitely long conduc-  
tor. To find the current distribution and the input resistance func-  
tion  $\Pi$  is introduced

$$E_r = \frac{\partial}{\partial r} \left( \frac{\partial \Pi}{\partial z} \right), \quad (1)$$

and Maxwell's equations are solved for a symmetrical field with re-

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S/109/61/006/007/009/020  
D262/D306

The electromagnetic field ...

spect to the conductor axis

$$\frac{\partial^2 \Pi}{\partial r^2} + \frac{1}{r} \frac{\partial \Pi}{\partial r} + \frac{\partial^2 \Pi}{\partial z^2} + \omega^2 \mu \epsilon \Pi = 0. \quad (2)$$

The unknown function  $A(y)$  is found from the boundary conditions at the surface of an ideal conductor

$$E_{\text{exs}} = -E_z \text{ for } r = \rho \quad (8)$$

in which  $E_{\text{exs}}$  is the field strength of extraneous forces at the conductor surface. In analyzing the propagation of electromagnetic waves along a single conductor, Vladimirskiy [Abstractor's note: Reference not specified] applies the boundary conditions of Leontovich

$$E_z + E_{\text{exs}} = \frac{\mu k}{k_0} H_{\varphi},$$

where

$$k = \frac{\omega}{c}; \quad k_0 = \sqrt{\frac{\omega^2}{c^2} \epsilon \mu + 4\pi i \mu \sigma}$$

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S/109/61/006/007/009/020  
D262/D306

The electromagnetic field ...

are wave numbers for vacuum and the conductor. In the discussed case, although the frequency is low, the field penetration can be disregarded owing to infinite conductivity which permits several simplifying assumptions. After several transformations restricting the region of integration to the values  $\tau$ ,

$$J_{LR} = \frac{4\pi}{p} e^{ik_s z} \int_0^m \frac{1}{\{\ln[-i\tau(2k_s + i\tau)\rho^2]\}^2 + \pi^2} \frac{e^{-\tau^2 d\tau}}{-i\tau(2k_s + i\tau)} \quad (20)$$

is derived finally. Finally the expression for current  $I_2$  in the conductors is derived as

$$\begin{aligned} I_z = i4\pi\omega e_k \mathcal{E} e^{ik_s z} & \left\{ \frac{1}{i2k_s} \frac{e^{-zh}}{\ln(-i2k_s \rho^2) + \ln h} + \right. \\ & + \int_h^1 \frac{1}{\pi^2 + \{\ln[-i\tau(2k_s + i\tau)\rho^2]\}^2} \frac{e^{-\tau^2 d\tau}}{-i\tau(2k_s + i\tau)} + \\ & \left. + \int_1^m \frac{1}{\pi^2 + \{\ln[-i\tau(2k_s + i\tau)\rho^2]\}^2} \frac{e^{-\tau^2 d\tau}}{-i\tau(2k_s + i\tau)} \right\}. \end{aligned} \quad (32)$$

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The electromagnetic field ...

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D262/D306

and when denoting

$$F(z) = \frac{1}{i2k_2} \frac{e^{-zh}}{\ln(-i2k_2\rho^2) + \ln h} + \int_h^1 \frac{1}{\pi^2 + (\ln[-i\tau(2k_2+i\tau)\rho^2])^2 - i\tau(2k_2+i\tau)} \frac{e^{-z\tau}d\tau}{\tau} +$$

$$+ \int_1^m \frac{1}{\pi^2 + (\ln[-i\tau(2k_2+i\tau)\rho^2])^2 - i\tau(2k_2+i\tau)} \frac{e^{-z\tau}d\tau}{\tau}.$$

the final expression for Eq. (32) becomes

$$I_z = i4\pi\omega\epsilon_{k_2} g e^{ik_2 z} F(z). \quad (33)$$

Using this formula, graphs were evaluated of the modulus of current as a function of  $z$  and of moduli  $e^{ik_2 z}$  and of function  $F(z)$  for a non insulated conductor of radius  $\rho = 2$  mm, placed in sea water, in wet and dry soil. Normalized graphs of moduli of the following functions: 1 -  $|I_z|$ ; 2 -  $|e^{ik_2 z}|$ ; 3 -  $|F(z)|$  for sea water, wet and

Card 4/5

PAVLOV, P.P.

Electromagnetic field and current distribution in an infinitely  
long noninsulated conductor submerged in a conductive medium.

Radiotekh. i elektron. 6 no.7:1106-1115 J1 '61. (MIRA 14:6)

(Electric wire)  
(Electromagnetic waves)

PAVLOV, P.P.

Electromagnetic field and current distribution along an infinite  
insulated wire in a conductive medium. Radiotekh. i elektron  
6 no.8:1293-1307 Ag '61. (MIRA 14:7)  
(Antennas (Electronics))  
(Radio waves)



PAVLOV, P.P.

Electromagnetic field and the input resistance of a turn with an infinitely long cylindrical ferrite core located in a conductive medium. Radiotekh. i elektron. 7 no.3:437-447 Mr '62. (MIRA 15:2)

(Antennas (Electronics))

(Electromagnetic waves)

(Cores (Electricity))

9.1100 (4000)

S/109/62/007/003/010/029  
D256/D302

AUTHOR: Pavlov, P.P.

TITLE: Electromagnetic field and input impedance of a turn on an infinitely long cylindrical ferrite core placed in a conducting medium

PERIODICAL: Radiotekhnika i elektronika, v. 7, no. 3, 1962, 437 - 447

TEXT: Antennas comprising a single turn wound on an infinite ferrite core have been considered previously by several authors. In the present investigation the electromagnetic field and the input impedance are considered, for such an antenna placed in a conducting non-magnetic medium, including an account of the losses taking place in the ferrite core. The electromagnetic field of the system includes space waves as well as surface waves propagating along the ferrite rod. The antenna was considered at comparatively low frequencies ranging from 6 to 60 kc/s, and therefore it was justified to assume a uniform current distribution along the turn so

Card (1/2)

Electromagnetic field and input ...

S/109/62/007/003/010/029  
D256/D302

that in a cylindrical system of coordinates the vector potential entering the wave equation reduced to its angle-dependent component. Relations were derived describing in terms of the properties of the core and the surrounding medium the following parameters: the propagation constant of the surface waves; the directional characteristics of the system; the contribution of the core in increasing the field strength of the space waves and the input impedance of the turn. Numerical results are presented in a form of curves for the system submerged in sea water, showing that for the considered range of frequencies the input impedance is determined by the field of the surface wave. It is pointed out that a similar conclusion regarding the active component of the impedance is valid only for the lower frequencies of the range considered. There are 5 references: 4 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: P.A. Miles, et al., Rev. Mod. Phys., 1957, 29, 3, 279.

SUBMITTED: June 9, 1961

Card 2/2

S/109/62/007/008/006/015  
D409/D301

9.1100

AUTHOR:

Pavlov, P.P.

TITLE:

Electromagnetic field and input impedance of a loop with an infinitely long cylindrical ferrite core, coated with a dielectric and placed in a conducting medium

PERIODICAL:

Radiotekhnika i elektronika, v. 7, no. 8, 1962, 1322-1331

TEXT:

The effect of the dielectric envelope on antenna efficiency is ascertained. This is of practical importance when the radiating system has to be isolated from the conducting medium; the dielectric makes the system mechanically stable and hermetic. It is required to find the field components in 3 media: the ferrite core, the dielectric, and the conducting medium. In the system under consideration, both space and surface waves propagate; the latter along the ferrite core. These waves are investigated over a frequency range of  $6 \cdot 10^3$  to  $6 \cdot 10^4$  cycles. After calculations, one

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S/109/62/007/008/006/015  
D409/D301

Electromagnetic field ...

obtains a transcendental equation for the propagation constant  $\gamma$  of the surface waves. This equation is solved by the method of successive approximations; the results are listed in a table, together with the phase-shift constant  $\alpha$  and the damping constant  $\beta$ . By comparing the obtained results with those of an earlier investigation by the author, it was found that the dielectric envelope leads to a decrease in  $\alpha$ , whereas  $\beta$  is not affected. Further, the directivity characteristic of the loop under consideration is calculated (by an approximate method). It was found that the dielectric envelope has little effect on the shape of the directivity characteristic. The field-strength of the space wave is also little affected by the dielectric. In calculating the impedance  $Z_{\text{input}}$ , the cylindrical functions entering the expression for the field strength, are approximated by the first terms of their series expansion; thereby one obtains integrals which are evaluated by numerical methods. The graphs for the active resistance and reactance, obtained by means of the electronic computer "Ural", are shown. It was found that the numerical method used, yielded sufficiently accurate results in the case of the reactance, whereas the resistance calculation.

Card 2/3

L 18490-63

ACCESSION NR: AP3006454

FGS(k)/EWT(1)/BDS

ASD/APGC

P1-4/PJ-4/P1-4 WR

S/0109/63/008/009/1523/1529

AUTHOR: Pavlov, P. P.

TITLE: Insulated loop antenna with spherical ferrite core located in a conductive medium

SOURCE: Radiotekhnika i elektronika, v. 8, no. 9, 1963, 1523-1529

TOPIC TAGS: insulated loop antenna, insulated antenna, loop antenna, spherical ferrite core, ferrite core, core

ABSTRACT: A loop antenna with a spherical ferrite core placed in a dielectric envelope (to insulate it from the surrounding conductive medium) was the subject of a detailed theoretical investigation in the long-wavelength range. The purpose of the investigation was to determine the dependence of radiation impedance and input resistances on core permeability and on the ratio of the radius of the spherical envelope to the radius of the core. It was found that the radiation impedance of an insulated loop antenna in the long-wavelength range is virtually independent of the

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ACCESSION NR: AP3006454

value of the relative ferrite permeability (at a relative permeability of 1000 or more). The spherical ferrite core can increase radiation impedance only nine times at the most. In order to obtain the maximum possible increase in field intensity in the conductive medium by means of a spherical ferrite core, it is necessary that the ratio of the envelope radius to the core radius be not less than two. "The author thanks D. N. Pokusin for his advice." Orig. art. has: 5 figures, 25 formulas, and 2 tables.

ASSOCIATION: none

SUBMITTED: 12Jul62

DATE ACQ: 30Sep63

ENCL: 00

SUB CODE: SD

NO REF SOV: 000

OTHER: 003

Card 2/2

ACC NR: AP6026424

SOURCE CODE: UR/0375/66/000/005/0068/0073

AUTHOR: Slavskiy, V. V. (Candidate of Technical Sciences); Paylov, P. P. (Candidate of Technical Sciences)

ORG: None

TITLE: Superconductivity and its use in engineering

SOURCE: Morskoy sbornik, no. 5, 1966, 68-73

TOPIC TAGS: superconductivity, shipbuilding engineering, antifriction bearing, electric generator, electric motor, electromagnetic propulsion, transformer

ABSTRACT: Superconductivity, a relatively recent discovery (1911 by Dutch Physicist Heike Kamerlingh-Danes) has become exceedingly important in recent years, and superconductors have a great future in solving many technical problems because new superconducting materials with high critical parameters have made it possible to create a variety of technical devices and instruments. Those areas in which superconductors have received recognition by having been put to practical use, and which can be used in shipbuilding, are discussed in detail. Certain of these areas are frictionless end bearings, superconducting power transformers, superconductive electrical generators and motors, and electromagnetic propellers. The burgeoning development of research in this field makes possible the suggestion that present obstacles will be

Card 1/2



ACC NR: AP6026424

resolved successfully, and that the time is not far off when various types of superconducting devices will find widespread application in many branches of engineering. Orig. art. has: 5 figures.

SUB CODE: 20, 13/SUBM DATE: None/ORIG REF: 003

Card 2/2



PAVLOV, P.P.; ANTONOV, N.M.; KULIKOV, B.A.; PLOTKIN, M.Z.; KHOVALOVA, A.M.;  
SELINA, V.G.

Using fine water spray for extinguishing petroleum product fires.  
Izv.vys.ucheb.zav.; neft' i gaz 1 no.9:85-88 ' 58.

(MIRA 11:12)

1. Azerbaydzhanskiy industrial'nyy institut imeni M. Azizbekova  
i TSentral'nyy nauchno-issledovatel'skiy institut protivopozharnoy  
oborony.

(Petroleum industry--Fire and fire prevention)

PAVLOV, P.P.; KULIKOV, B.A.; RUVIMSEIY, V.A.; VOL'PE, S.M.

Determining the permissible current load for a single conductor of  
the KTO-4 logging cable. Energ.bkul. no.10:1-3 0 '58.

(MIRA 11:11)

(Electric cables)

PAULOU, P.P.

//  
The viscosity of crude-oil emulsions. P. P. Pavlov.  
Trudy Azerbaidzhan. Ind. Inst. im. M. Azisbekova 1955,  
No. 9, 78-80 (in Russian).—The viscosity of crude oil-water  
emulsions (I) depends on temp., concn., and the nature  
of the oil. The viscosity values for I are 10-12 times  
higher than those of crude oils and 250-300 times higher  
than that of water. An increase of the water content of I  
usually causes an increase in viscosity. The size of the dis-  
persed particles as well as the type of the dissolved salts  
have an effect on the viscosity of I.  
T. Durbak

3

mb //

GLEBOV, V.A.; PAVLOV, P.S., redaktor; KONYASHINA, A.D., tekhnicheskij redaktor

[Manual for firemen operating pumping apparatus] Posobie dlia stvol'shchika pozharnoi okhrany. Moskva, Izd-vo Ministerstva kommunal'nogo khoziaistva RSFSR, 1955. 72 p. (MIRA 8:7)  
(Firemen's manuals)

PAVLOV, P. S.

N/5  
780.2  
.p3

Osnovnyye fondy i proizvodstvennyye moshchnost i promyshle-  
nnosti SSSR i ikh ispol' zovaniye (Fixed Capital and pro-  
duction capacity of USSR industry and their utilisation)  
Lektsiya, pročitannaya v Vysshey partiynoy shkole pri TSK  
KPSS. Moskva, 1953 25 p. Bibliographical footnotes.

1716000 P. 1  
CHEGODAYEV, M.V., inzhener; GERMAN, A.M., inzhener; PAVLOV, P.T., inzhener.

Demonstration building of apartment houses with walls made of large  
silicate blocks. Nov.tekh.i pered.op.v stroi. vol.19:8-13 Ag '57.  
(MIRA 10:10)

(Apartment houses) (Building blocks)



PAYLOR, P.T., inzhener.

Colored silicate bricks. Nov. tekhn. i pered. op. v stroi. 18 no. 11:24-  
26 N'56. (MIRA 10:1)

(Brickmaking)

*Pavlov, P. P. Ye*

Category : BULGARIA/Optics - Photometry, Colorimetry, and Illumination  
Engineering

K-10

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 5358

Author : Pavlov, P. P. Ye.

Title : New Definitions and Methods for Densitometric Analysis

Orig Pub : Izv. B"lgar. AN Otd. fiz.-matem. i tekhn. n., ser. fiz., 1955, 5,  
169-191

Abstract : The connection between regular, diffused, and scattered transparency and the regular diffused and scattered density are investigated. A method is given for determining these quantities by densitometric means. A photometric setup with an Ulbricht sphere is proposed for the measurement.

Card : 1/1

PAVLOV, P.Y. [Pavlov, P.I]

Condition of fish stocks in the lower Dnieper prior to the  
construction of the dam of the Kakhovka Hydroelectric Power Station.  
Trudy Inst. gidrobiol. AN URSR no.34:224-254 '58. (MIRA 12:3)  
(Dnieper River--Fishes)

USSR/General and Specialized Zoology. Insects. Harmful  
Insects and Acarids. Forest Pests.

P

Abs Jour : Ref Zhur Biol., No 6, 1959, 25477

Author : Pavlov, P.V.

Inst : All-Union Institute for the Protection of Plants.

Title : Problems of Forest Protection and Problems in the  
Control of Forest Pests in Saval'Forestry.

Orig Pub : Tr. Vses. in-ta zashchity rast., 1957, vyp. 8, 19-36

Abstract : On the basis of investigations of mass-propagation  
outbreaks of pests for the 50 years and on the basis  
conducted measures for forest protection, the following  
deductions were made. Conditions for plant resistance  
to pests are created during its planting. Problems of  
forest-economy operations. To avoid the creation of  
pure cultivations, especially those of pine trees;

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PAVLOV, P.V.

Forest protection problems and tasks in forest pest control in  
the Savala forestry district. Trudy VIZR no.8:19-36 '57.  
(MIRA 12:8)

1. Direktor Saval'skogo leskhoza.  
(Balashov Province--Trees--Diseases and pests)

PAVLOV, P.V.; PANTELEYEV, V.A.; MAYOROV, A.V.

Antimony diffusion in silicon along dislocations. Fiz. tver. tela o  
no.2:382-389 F '64. (MIRA 17:2)

1. Gor'kovskiy gosudarstvennyy universitet imeni Lobachevskogo.

PAVLOV, P. V., Cand Phys-Math Sci -- (diss) "Crystalline structure of herderite, datolite, and gadolinite." Mos, [Publication of Acad Sci USSR], 1958. 9 pp<sup>with ill's</sup> (Acad Sci USSR, Inst of Crystallography, Gor'kiy State Univ im N. I. Lobachevskiy), 130 copies (KL, 18-58, 95)

NOSKOV, B.M.; PAVLOV, P.V.; SHCHERBEDINSKIY, G.V.

Diffusion of tin in  $\alpha$  and  $\beta$ -phases of the system copper - tin.  
Izv. vys. ucheb. zav.; fiz. no.4:163-167 '59. (MIRA 13:3)

1. Fiziko-tekhnicheskiy institut Gor'kovskogo gosuniversiteta imeni  
N.I. Lobachevskogo.

(Copper-tin alloys)



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SOV/126-8-5-14/29

AUTHORS: Zelinskiy, M.S., Noskov, B.M., Pavlov, P.V., and Shitova, E.V.

TITLE: Influence of Vanadium Additions on the Self-Diffusion of Iron

PERIODICAL: Fizika metallov i metallovedeniye, 1959, Vol 8, Nr 5, pp 725-730 (USSR)

ABSTRACT: In contrast to the effect of many other transition elements, vanadium has been found to give a weaker atomic bonding than occurs in pure iron (Refs 6, 7). Since for other metals results of diffusion and X-ray investigations agree, the authors decided to study the self-diffusion of iron with respect to vanadium content. Although this had already been studied, work by Sanadze and Tsivtsivadze (Ref 8) has thrown doubt on some previous results (Refs 4, 5, 9). The present authors used three Fe-V (0.48, 1.01 and 2.04% V) and two Fe-V-C (0.096, 2.46% V and 0.820, 0.25% C, respectively) alloys (compositions shown in Table 1). 5 x 8 x 25 mm plane parallel specimens were subjected to homogenizing annealing at 1100 °C for 20 hours. A thickness of about 0.005 mm of radioactive Fe<sup>59</sup> was electrodeposited on one face. Pairs of specimens with

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30V/126-8-5-14/29

**Influence of Vanadium Additions on the Self-Diffusion of Iron**

their active faces in contact were subjected to isothermal diffusion annealing for 4-200 hours in a quartz tube evacuated to  $10^{-3}$  mm Hg. Temperature (900-1300 and 1100-1340 for the Fe-V and Fe-V-C alloys, respectively) was controlled to  $\pm 5$  °C. After annealing specimens were rapidly quenched and the self-diffusion coefficients determined by removing layers and measuring the integral residual gamma-activity of the remainder of the specimen (Ref 10), with precautions to avoid end effects. Two to four independent determinations were made at each temperature. From the break at 1100 °C on the curve of log D vs inverse of absolute temperature it was deduced that below this temperature inter-crystallite diffusion plays a big part. Results above 1100 °C referred to uniform diffusion and were used in calculating the coefficients: these and other diffusion parameters are shown in Table 2. In Table 3 the corresponding data for inter-crystallite diffusion calculated by Fisher's formula (Ref 11) are given for the Fe-V alloys. The linear relation between the logarithm of the uniform diffusion coefficient and

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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |  |  |  |  |  |  |  |                     |  |  |  |  |  |  |  |  |  |
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| 1ST AND 2ND COLUMNS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |  |  |  |  |  |  | 3RD AND 4TH COLUMNS |  |  |  |  |  |  |  |  |  |
| PROCESSING AND PROPERTY INDEX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |  |  |  |  |  |  |  |  |                     |  |  |  |  |  |  |  |  |  |
| <div style="display: flex; justify-content: space-between;"> <span>PAVLOV P-V</span> <span>116</span> </div> <div style="display: flex; justify-content: space-between;"> <span>ca</span> </div> <p>Purification and concentration of antimeningococcal therapeutic serum. A. V. Markovich and P. V. Pavlov. <i>Z. Mikrobiol. Epidemiol. Immunmittelforsch.</i> (U. S. S. R.) 1939, No. 11-12, 62-61 (in English, 63).--The serum is dil. to 10 times its vol. with distd. water, and acidified with AcOH to a pH corresponding to max. pptn. of the isolable globulins. By this method 63-7% of the inactive proteins of the antimeningococcal serum are removed. Expts. with the purified and concd. antimeningococcal serum have proved that they are more effective than the unpurified serum. Seven references. W. R. Henn</p> |  |  |  |  |  |  |  |  |  |                     |  |  |  |  |  |  |  |  |  |
| ASB-51A METALLURGICAL LITERATURE CLASSIFICATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |  |  |  |  |  |  |  |                     |  |  |  |  |  |  |  |  |  |
| SUBJECTIVE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |  |  |  |  |  |  | OBJECTIVE           |  |  |  |  |  |  |  |  |  |
| SUBJECTIVE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |  |  |  |  |  |  |  |  | OBJECTIVE           |  |  |  |  |  |  |  |  |  |

PAVLOV, P. <sup>V.V.</sup> et al.

"Action of Pencillin on the Whooping Cough Bacillus in an Experiment,"  
Zhur Mikrob, Epidem, i Immunobiol, No. 11, p 52, 1948.

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"Manual on the Applicati. of Bacterial and Virus Preparations"  
Spravochnik po Primeneniyu Bakteriynkh i Virusnykh Preparatov, 1961

FUKS, I.M.; PAVLOV, P.V., zaveduyushchiy; TIMAKOV, V.D., professor, direktor.

Sensitizing properties of diphtheria anatoxins. Zhur.mikrobiol.epid.i  
immun. no.4:19-24 Ap '53. (MLRA 6:6)

1. Otdel profilaktiki detskikh infektsiy Instituta epidemiologii i mikro-  
biologii imeni pochetnogo akademika N.F. Gamalei Akademii meditsinskikh  
nauk SSSR (for Pavlov, Fuks). 2. Institut epidemiologii i mikrobiologii  
imeni pochetnogo akademika N.F. Gamalei Akademii meditsinskikh nauk SSSR  
(for Timakov). (Diphtheria) (Toxins and antitoxins)

PAVLOV, I. V.

"On the High-Level Training Among Members of the Division" (paper read at a session of the Institute's Scientific Council held during the first half of 1955). Proceedings of Inst. of Mem. and Microbiol. im. Gamaleya, 1954-56.

Division of Children's Infections [Pavlov, I. V., head.], Inst. of Epidem. and Microbiol. im. Gamaleya, AMN USSR.

SO: Sum 1186, 11 Jan 57

USSR / Microbiology. Microbes Pathogenic for Man  
and Animals. Bacteria. Root Bacteria.

F-4

**Abs Jour:** Ref Zhur-Biol., 1958, No 17, 76797.

**Author :** Pavlov, P. V.; Nekhotenova, Ye. I.

**Inst :** Not given.

**Title :** Test of Extraction of a Diphtheria Toxin in Con-  
ditions of Deep Cultivation of Park-Williams 8.  
Report 1. Toxin Formation in Conditions of Deep  
Cultivation.

**Orig Pub:** Zh. mikrobiol., epidemiol. i immunobiologii, 1957,  
No 4, 98-101.

**Abstract:** By the method of deep cultivation of the diph-  
theria strain Park-Williams 8 during purging with  
a mixture of air with CO<sub>2</sub>, passed over a nutrition  
medium, the toxin formation is successfully speeded  
up and increased. The toxin was obtained even in

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EXCERPTA MEDICA Sec 4 Vol 12/5 Med. Micro. May 59

1256. PURIFIED ADSORBED SCARLET FEVER TOXIN. I. THE METHOD OF OBTAINING SCARLET FEVER TOXIN OF HIGH TITRE AND ITS PURIFICATION (Russian text) - Pavlov P. V., Akimova V. V. and Pomvankovich A. N. Moscow - ZH. MIKROB. EPID. I IMMUNOBIOLOG. 1957, 11 (120-125) Graphs 3 Tables 2 illus. 1

A strain of haemolytic streptococcus was cultivated in 'cellophane' bags. On the 3rd day of growth there were 2-3 million skin doses per 1 ml. of toxin. The toxin formation reached its maximum (5 million skin doses per 1 ml.) on the 7th-9th day. All toxin was in the bag, except a small amount in the surrounding nutrient medium. A marked lowering of pH both in dialysed toxin and in the medium surrounding the bag was observed. After numerous sedimentations of dialysed toxin by alcohol at low temperature, a highly purified preparation was obtained with 240 million skin doses per 1 mg. of nitrogen. The preparation was electrophoretically homogeneous.

Chakhava - Moscow

PAVLOV, P.V.; NEKHOTENOVA, Ye.I.

Obtaining diptherial toxin in Park-Williams 8 stab cultures.  
Report No.1: Production of toxin in stab cultures. Zhur.mikrobiol.  
epid. i immu. 28 no.4:98-101 ap '57. (MLA 10-10)

1. Iz Instituta epidemiologii i mikrobiologii imeni N.F.Gamalei  
AMN SSSR.

(DIPHTHERIA, immunol.  
toxin prod. in stab cultures)

PAVLOV P.V.

REKHOTENKOVA, Ye.I.; PAVLOV, P.V.

Obtaining diphtherial toxin in Park-Williams-8 deep culture Report  
No.2: Antigenic and immunogenic properties of diphtherial anatoxins  
obtained from toxins in deep cultures. Zhur.mikrobiol.epid. i immun.  
28 no.7:61-64 J1 '57. (MIK 10:10)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN  
SSSR.

(DIPHTHERIA. immunology.  
antigenic & immunogenic properties of anatoxins from  
toxins in deep cultures (Rus))

PAVLOV, P. V. Doc Med Sci -- (diss) "Active ~~scarlatina~~<sup>scarlatina</sup> immunization  
and its effectiveness." Mos, 1958. 16 pp (Acad Med Sci USSR), 200 copies  
List of author's works, pp 15-16 (15 titles) (KL, 14-58, 116)